In the Claims

The status of claims in the case is as follows:

1	 [Currently amended] A collaboration space including a
2	plurality of rooms in a hierarchical structure with access
3	control list control on rooms and access control list
4	control on forward pointers to child rooms, comprising:
5	a place comprising a plurality of rooms, each room being a
6	database subrooms, each subroom being an independent
7	entity belonging to said place.
8	said place having a first data note including a
9	directory of members of said place and
10	each subroom within said place having a data note
11	associated therewith containing an access control lis
12	of members selected exclusively from said directory of
13	members by a member of said place having manager or
14	author authority with respect to said subroom for
15	specifying users of said place authorized to access
16	said room said subroom;
17	forward and reverse pointers for linking said rooms said
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19		including indicia identifying said child room, indicia
20		specifying the address location of the database entity
21		forming said child room, and a readers field for providing
22		access control list control on said forward pointer;
23		said readers field being a members object for identifying
24		those members of said subset of members of said place
25		authorized to access said room a parent subroom that are
26		also authorized to access a child subroom and for each
27		member of said subset of members a level of authorization;
28		and
29		a document readers field for a document containing data in
30		said subroom being a members object for identifying a subset
31		of members of said place authorized to access a subroom who
32		are also authorized to access said document.
1	2.	[Original] The collaboration space of claim 1, said levels
2	of au	thorization including manager, author, and reader.
1	3.	[Currently amended] A collaboration space comprising.

subrooms, each said forward pointer to a child room

a place comprising a plurality of rooms in a hierarchical

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3 st	ructure	linked	by	forward	and	backward	pointers;
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- a member directory for said place identifying users
- 5 authorized to enter said place;
- each said room comprising one or more pages, and for each
 said room a members object for identifying a subset of
 members of said place authorized to access said room and for
 each member a level of authorization, each member of said
 subset of members being a user authorized in said member
 directory to enter said place;
- said rooms including a parent room and a child room, and 12 said pointers comprising forward and backward pointers for 13 enabling the security of each said room to be independently 14 15 managed, said forward pointers including indicia identifying 16 said child room, indicia specifying the address location of the database forming said child room, and a readers field 17 for providing access control list control on said forward 18 pointer, said readers field for identifying those members of 19 20 said subset of members of said place authorized to access a parent room that are also authorized to access a child room.
- 1 4. [Previously presented] The collaboration space of claim 3,
- 2 said readers field including an access authority for each reader
- 3 authorized to enter said room selectively as manager, author or

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- 4 manager.
- 1 5. [Previously presented] The collaboration space of claim 3,
- each said forward pointer being a secure pointer by carrying the
- 3 same level of security as the child room to which it points.
- 1 6. [Previously presented] The collaboration space of claim 5,
- 2 each said forward pointer carrying in said readers field the same
- 3 security as that of the subroom to which it points.
- 7. [Previously presented] The collaboration space of claim 6,
- 2 further comprising a display for presenting to a specific user
- 3 viewing a parent room a listing of its subrooms, said listing
- 4 including for said specific user only those subrooms for which
- 5 said readers field in said forward pointer includes an entry
- 6 authorizing access by said specific user.
- 1 8. [Currently amended] A-database An access control system for
- 2 controlling user access to forms and documents a collaboration
- 3 space organized in a hierarchical structure of parent rooms and
- 4 <u>child rooms containing said forms and documents</u>, comprising:

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5	an access control l	ist for specif	ying users who can <u>are</u>
6	members of said col	laboration spa	<u>ce</u> or cannot access said
7	database ;		
			•
8	for users authorize	d to access sa	id database <u>collaboration</u>
9	space, said access	control list f	urther specifying access
10	levels and roles de	termining [[th	e]] specific actions said
11	users are authorize	d to perform,	said roles including
12	reader, author, and	manager;	
13	a form selectively	including a for	rm access list;
14	said database a room	n in said colla	boration space including
15	one or more document	s at least one	document created from
16	said form;	•	
		·	
17	<u>a</u> forward pointers p	ointer linking	said form to said
18	documents and revers	e pointers lin	king said documents
19	document and a rever	se pointer lin	king said document back to
20	said form;	•	
21	said form access lis	t identifying	a subset of users who are
22			e who are authorized to
23	read documents creat		
24	each said forward po	inter to a doc	ument including indicia
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25	identifying said document, indicia specifying the address
26	location of said document, and a readers field for providing
27	access control list control on said forward pointer
28	including a document access field selectively including for
29	each user authorized to access said document indicia
30	specifying whether said authorized user can read or modify
31	said document; users identified in any said form access list
32	for said form from which said document was created being
33	included in said readers field;
34	entries in said readers field granting authorization to an
35	individual user equal to or less than the authorization for
36	said individual user in said access control list; and
37	entries in said authors field selectively granting
38	authorization to a user authorized as an author in said
39	access control list to edit a document which said author
40	creates.

- [Currently amended] A method for controlling access to rooms 1
- within a collaboration place, comprising the steps of: 2
- maintaining for said collaboration place an access control 3
- list identifying those users authorized to enter said place;

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5	providing forward and reverse pointers linking said rooms in
6	a hierarchical structure within said place, said forward
7	pointers including indicia identifying a child room, indicia
8	specifying the address location of the database forming said
9	child room, and a readers field for providing access control
10	list control on said forward pointer, said readers field
11	exclusively specifying a subset of said users authorized to
12	enter said place; and
13	displaying a parent room to a specific user, said parent
14	room including a list of children rooms for which said
15	readers fields on said forward pointers authorize said
16	specific user access.
1	10. [Currently amended] A method for creating a child room
2	within a collaboration place data base, comprising the steps of:
3	providing for said collaboration place data base a first
4	access control list identifying users authorized to access
5	said data base;
6	providing for said child room a back pointer to a parent
7	room; and
8	providing at said parent room for said child room a forward
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9	pointer from said parent room to said child room, said
10	pointer including indicia identifying said child room,
11	indicia specifying the address location of the database
12	forming said child room, and a readers access field listing
13	a subset of users in said first access control list who are
14	users authorized to access said child room for providing a
15	second access control list specific to said forward pointer.
16	initially including in said readers access field for a child
17	room created from a form users identified in a form access
18	list identifying users authorized to read rooms created from
19	said form; and
20	limiting reader access in said readers access field to said
21	child room for a specific user to no more than the access
22	granted said specific user in said first access control list

11. [Canceled]

12. [Canceled]

- 1 13. [Currently amended] A program storage device readable by a
- 2 machine, tangibly embodying a program of instructions executable
- 3 by a machine to perform method steps for controlling access to
- 4 rooms within a collaboration place, said method steps comprising:

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5	maintaining for said collaboration place a first access
6	control list identifying those users authorized to enter
7	said place:

8 providing forward and reverse pointers linking said rooms 9 within said place, said forward pointers including indicia 10 identifying a child room, indicia specifying the address 11 location of the database forming said child room, and a 12 second access control list including a having a readers field specifying each user having manager, author, and 13 reader access to said child room, said readers field 14 exclusively specifying a subset of said users authorized to 15 16 enter said place; and

displaying a parent room to a specific user, said parent room including a list of children rooms for which said readers fields on said forward pointers authorize said specific user access.

1 14. [Canceled]

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- 1 15. [Currently amended] A computer program product or computer
- 2 program element for controlling access to rooms within a
- 3 collaboration place according to the steps of comprising:

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4	a computer readable medium:
5	first program instructions for maintaining for said
6	collaboration a first access control list identifying those
7	users authorized to enter said place;
8	second program instructions for providing in a [[child]]
9	parent room second access control list identifying a subset
10	of those user authorized to enter said place who are also
11	authorized to enter said [[child]] parent room with manager
12	author, or user access;
13	third program instructions for providing forward and reverse
14	pointers linking said rooms parent room with a child room in
15	a double-linked list within said place, said forward
16	pointers having a readers field providing a third access
17	control list on said forward pointer, said third access
18	control list providing access to said child room equivalent
19	for those members who are included in [[to]] said second
20	access control list who are also authorized to access said
21	child room;
22	fourth program instructions for displaying a parent room to
23	a specific user, said parent room including on said forward
24	pointers a list of children rooms for which said readers
25	fields authorize said specific user access; and wherein
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- 26 said first, second, third, and fourth program instructions
- 27 are recorded on said computer readable medium.